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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/367,108 | 08/10/1999 | JUKKA HAAPANIEMI | 30-508 | 3882 |

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EXAMINER

PATTERSON, MARC A

ART UNIT

PAPER NUMBER

1772

DATE MAILED: 07/08/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/367,108

Applicant(s)

HAAPANIEMI ET AL.

Examiner

Marc A Patterson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION
WITHDRAWN REJECTIONS

1. The 35 U.S.C. 102(b) rejection of Claims 18 – 27 as being anticipated by Qui et al (U.S. Patent No. 5,505,395), of record on page 2 of the previous Action, is withdrawn.

NEW REJECTIONS

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 18 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The term ‘moist’ does not appear in the specification.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The terms ‘perpendicular’ is indefinite, as its meaning is unclear.

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6. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "moist" in claim 18 is a relative term which renders the claim indefinite. The term "moist" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Correction and / or clarification is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 18 – 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Qui et al (U.S. Patent No. 5505395) in view of Beard et al (U.S. Patent No. 4,729,175).

With regard to Claims 18 – 20 and 22, Qui et al. disclose a paperboard core (paperboard winding core; column 3, line 66); comprising a plurality of structural plies (layers; column 7, lines 48 – 51); at least one ply has a machine direction modulus of elasticity of at least 8000 Mpa, (1.58 M psi; column 10, lines 5 – 16; therefore also greater than 7500 Mpa); the ratio of the machine direction modulus of elasticity to the cross machine direction modulus of elasticity is 2. Qui et al fail to disclose a core comprising a structural ply which is made by press drying.

Beard et al teach that it is well known in the art to produce paperboard by press drying, for the purpose of producing paperboard having high strength (column 1, lines 60 – 68).

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It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for press drying in Qui et al. in order to producing paperboard having high strength as taught by Beard et al.

Qui et al also fail to disclose a core in which at least one ply has a cross machine direction of modulus elasticity of greater than 4500 Mpa and a cross machine direction modulus of elasticity of greater than 4500 Mpa and a squareness of less than 2.4. However, Qui et al disclose a core in which one ply has a cross machine direction of elasticity of 3660 Mpa and a squareness of 2.98 (column 10, lines 5 – 16). Therefore, the cross machine direction modulus of elasticity and squareness would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end use of the product. It therefore would be obvious for one of ordinary skill in the art to vary the cross machine direction modulus of elasticity and squareness, since the cross machine direction modulus of elasticity and squareness would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Qui et al *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

With regard to Claims 21 and 23, the paperboard core has a wall thickness of 10 mm and an inside diameter of greater than 70 mm (column 5, lines 66 – 67; column 6, lines 1 – 8) and a paperboard ply located in the middle (the structural plies are all paperboard plies). A middle paperboard ply width of at least 185 mm, and at least 205 mm, is are inherent to the core disclosed by Qui et al., as it is identical to the core of the claimed invention (the claimed width is geometrically inherent, because of the claimed inside diameter and thickness of the cylinder)

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ANSWERS TO APPLICANT'S ARGUMENTS

9. Applicant's arguments regarding the 35 U.S.C. 102(b) rejection of Claims 18 – 23 as being anticipated by Qui et al (U.S. Patent No. 5,505,395), of record on page 2 of the previous Action, have been considered and have been found to be persuasive. The rejection is therefore withdrawn. The new 35 U.S.C. 103(a) rejection of Claims 18 – 23 as being unpatentable over Qui et al (U.S. Patent No. 5505395) in view of Beard et al (U.S. Patent No. 4,729,175) above is directed to amended Claims 18 – 23.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Patterson, whose telephone number is (703) 305-3537. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached at (703) 308-4251. FAX communications should be sent to (703) 872-9310. FAXs received after 4 P.M. will not be processed until the following business day.

Marc A. Patterson, PhD.

Marc Patterson
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[Signature]
HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

5/15/02